

***REMARKS***

***Amendments to the Claims***

Claims 62 and 67 have been amended to better clarify the various steps of the claimed methods. Claims 63 and 64 have been amended to maintain proper antecedent basis between those claims and claim 62. All amendments are fully supported by the specification as originally filed and no new matter has been added.

***Claim Rejections under 35 U.S.C. § 103***

**1. Rejection of Claim 61 under 35 U.S.C. § 103(a)**

The Examiner rejected claim 61 under 35 U.S.C. § 103(a) as being unpatentable over Sizer et al. For the reasons set forth below, applicant respectfully disagrees.

The Examiner has failed to make a *prima facie* case for obviousness under 35 U.S.C. § 103(a). “To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success.

Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.” MPEP § 2143 (Emphasis added).

In this case the patent reference, Sizer et al., fails to teach all of the claim limitations, as the Examiner readily admits (page 3 of the Detailed Action): “Sizer fails to teach that the

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temperature control system uses the waste heat from the light source to heat the photosensitizer.”

Thus the Examiner has failed to make a *prima facie* case of obviousness under 35 U.S.C. § 103(a). The Examiner proceeds to argue that “[i]t would have been obvious to one of ordinary skill in the art at the time the invention was made to adjust the temperature control system described in Sizer to facilitate use of the waste heat from the light source to heat the photosensitizer . . . .” However, the Examiner fails to cite any source, whether Sizer et al. or another reference, which teaches or suggests this missing element. “To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.” MPEP § 2143.03 (*citing In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)).

Furthermore, to the extent that the prior art relied upon may suggest the desirability of the claimed invention, which suggestion can come from, *inter alia*, the nature of the problem to be solved, MPEP § 2143.01, Sizer et al. fails to provide the necessary suggestion or motivation. In this case the problems to be solved by the claimed invention, on one hand, and the Sizer et al. reference, on the other hand, are very different. In the claimed invention one of the goals is to provide a decontamination system that uses energy efficiently, with possible uses in field situations where there might be limits to the amount of power available. Furthermore in field situations a system must be usable under varying and unpredictable ambient conditions which could include cold weather.

In contrast the system disclosed in Sizer et al. is intended to be permanently installed for use in a factory, with the result that portability and power usage are of limited concern. Furthermore, given the expectation that the environmental conditions of the factory are likely to

be controlled within a narrow range of temperatures, there was no consideration in Sizer et al. for a need to warm the photosensitizer. As such there is no suggestion or motivation in Sizer et al. to modify that reference to generate the invention of claim 61.

Indeed, Sizer et al. in fact teaches away from using waste heat from the UV source to warm the photosensitizer. In column 6, lines 47-60 of Sizer et al. it is indicated that the excess heat generated by the UV source is a nuisance that must be dealt with to keep the lamp from overheating and possibly damaging the packaging material that is being disinfected. The goal of Sizer et al. is not only to remove the heat that is generated but also to minimize production of heat in the first place by using an excimer UV source rather than the mercury-based UV lamps that had been used previously. All of the independent claims of Sizer et al. contain the limitation of using an “excimer UV source”. Nowhere in Sizer et al. is there mentioned any suggestion of using the excess heat generated by the UV source to do something useful; the heat is simply “removed”.

The fact that Sizer et al. saw the excess heat of the lamp as a problem to be dealt with, by using a cooling system as well as by employing a lamp that produces less heat, rather than a potential benefit actually teaches away from the idea of using the excess heat for a beneficial purpose, such as warming the photosensitizer.

In summary applicant respectfully disagrees with the Examiner’s conclusion that claim 61 is obvious under 35 U.S.C. § 103(a), for the reasons discussed above.

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**2. Rejection of Claims 62-66 under 35 U.S.C. § 103(a)**

The Examiner rejected claims 62-66 under 35 U.S.C. § 103(a) as being unpatentable over Bayliss et al. in view of Blidschun et al. and further in view of Vitta, Stewart et al., and Sutton. As argued below, the amendments of claims 62-64 contained herein renders this rejection moot.

Applicant has amended claim 62 to further elucidate the various steps involved in the method of decontaminating the surface of a contaminated object, to make clearer the distinctions between this method and that constructed by the Examiner from the cited references. In particular none of the cited references contain the steps of attracting the overspray of the electrically charged photosensitizer towards the portable barrier or depositing the overspray upon the portable barrier.

**3. Rejection of Claims 67-68 under 35 U.S.C. § 103(a)**

The Examiner rejected claims 67-68 under 35 U.S.C. § 103(a) as being unpatentable over Vitta, Stewart et al., and Sutton in view of Bayliss et al. and Blidschun et al. As a result of the amendment of claim 67 provided herein and for the reasons set forth below, applicant respectfully disagrees with this conclusion of unpatentability and requests that this rejection be reconsidered and withdrawn.

Because the cited references do not teach all of the elements of the claims, the Examiner has failed to make a *prima facie* case for obviousness under 35 U.S.C. § 103(a), as is outlined in greater detail above, by failing to provide references that teach or suggest all of the claimed limitations. In particular, none of the cited references teach or suggest the limitation “establishing an air flow into the exit and out of the entrance”, as claimed in claim 67. As the

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Examiner states on page 7 of the Detailed Action, Stewart et al. mention the need to prevent contaminated air in some compartments from mixing freely with adjacent compartments (col. 4, lines 19-22). However, the solution offered by Stewart et al. to this problem, maintaining the compartments at negative pressure, is different than that claimed in claim 67. Nowhere in Stewart et al. or any of the other cited references is it taught or suggested to “establish an air flow into the exit and out of the entrance” of a barrier. Claim 67 has been amended as provided herein to help clarify the various steps of the method claimed and to make clear the differences between the claimed invention and the cited references.

***Allowable Subject Matter in Parent Application***

Claims 59-60 are allowed.

***Conclusion***

For the reasons discussed above, applicant respectfully submits that all of the claims are allowable over the prior art of record.

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, he is invited to telephone the undersigned at the number provided.

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Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,



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